

**U.S. Department of Energy**  
**Washington, D.C.**

**PAGE CHANGE**

**DOE M 460.2-1 Chg 1**

Approved: 9-23-02  
Chg 1: XX-XX-03

**SUBJECT: RADIOACTIVE MATERIAL TRANSPORTATION PRACTICES MANUAL**

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1. PURPOSE. To transmit revised pages to DOE M 460.2-1, *Radioactive Material Transportation Practices Manual*, dated 9-23-02.
2. EXPLANATION OF CHANGES. To modify the parenthetical explanations in paragraphs 5.2.1a(4)(a) and 5.3.1a(4)(a).
3. FILING INSTRUCTIONS.

Remove	Dated	Insert	Dated
Page 14	9-23-02	Page 14	XX-XX-03
Page 17	9-23-02	Page 17	XX-XX-03

After filing the attached pages, this transmittal may be discarded.

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Office of Environmental Management

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# **RADIOACTIVE MATERIAL TRANSPORTATION PRACTICES MANUAL**

*for use with  
DOE O 460.2*

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**U.S. DEPARTMENT OF ENERGY**  
**Assistant Secretary for Environmental Management**

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#### 4.2.2 Classified National Security Shipments

- a. General information, as described above, on both highway shipments of classified materials made by the Office of Transportation Safeguards and on naval spent fuel shipments, is discussed with State and tribal officials.
- b. DOE works with contacts, designated by states and tribes, with needs for information about classified national security shipments.

### 5. ROUTING

#### 5.1 Introduction

This section addresses the identification and selection of highway and rail transportation routes for shipments of DOE radioactive materials, but does not change current agreements between DOE and states and tribes regarding the routing of DOE shipments.

#### 5.2 Highway Routing

##### 5.2.1 Non-Classified Shipments

- a. Spent Nuclear Fuel, High-Level Waste, and Tritium-Bearing Reactor Components
  - (1) Highway routes are selected in accordance with 49 CFR 397.101(b) for these highway route-controlled quantity shipments.
  - (2) DOE/transportation contractors analyze proposed routes using transportation models (such as HIGHWAY).
  - (3) States and tribes may designate routes in accordance with DOT regulations (49 CFR 397.103). Additional input resulting from stakeholder review of projected shipment planning information is considered. Routes are documented in specific shipment transportation plans.
  - (4) For safeguards and security purposes, the following practices apply:
    - (a) For spent nuclear fuel shipments involving NRC-licensed material or licensees (e.g., university and research reactor spent nuclear fuel shipments), the shipper or transportation contractor submits routes for NRC approval in accordance with 10 CFR 73.37.
    - (b) The following shipments are not subject to NRC safeguards and security review:

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Vertical line denotes change.

planning information is considered. Routes are documented in specific shipment transportation plans.

- (4) For safeguards and security purposes, the following practices apply:
- (a) Routes for spent nuclear fuel shipments involving NRC-licensed material or licensees (e.g., university and research reactor spent nuclear fuel shipments) are submitted by the shipper or transportation contractor for NRC review in accordance with 10 CFR 73.37.
  - (b) The following shipments are not subject to NRC safeguards and security review:
    - shipments of tritium-bearing reactor components;
    - high-level waste shipments;
    - shipments of domestic DOE-owned spent nuclear fuel [conducted in compliance with DOE Orders, whose requirements were approved by DOT under 49 CFR 173.22(c)(2) as essentially equivalent to NRC's].
- (5) For spent nuclear fuel and high-level waste shipments made under the NWPAA, the responsible program will also follow the route selection requirements in the operational protocols identified in "Acquisition of Waste Acceptance and Transportation Services for the Office of Civilian Radioactive Waste Management" (Draft RFP #DE-RP01-98RW00320 or subsequent revisions), including DOE responsibility for stakeholder relations and final route approval.

b. Transuranic Waste Shipments

- (1) Shipments to the Waste Isolation Pilot Plant. No rail shipments to WIPP are currently planned. The protocol for rail shipments to WIPP will be developed if a decision is made to utilize rail.
- (2) Other TRU Shipments. DOE is examining the requirements to be used for these shipments.

c. Low-Level and Mixed Low-Level Waste. DOE or its designated shipper specifies carriers and interchange points between carriers. Each carrier selects the specific route to be used while the shipment is in the carrier's custody and care.

5.3.2 Classified National Security Shipments

National security rail shipments are routed as described above for spent nuclear fuel and high-level waste (Section 5.3.1.a.(1)). Routing information is made available to State and tribal

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